

Rec'd PGT/PTO 27 MAR 1997

FORM PTO-1390 (REV 10-95)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				07856-0007	
				U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)	
INTERNATIONAL APPLICATION NO. PCT/EP95/03757		INTERNATIONAL FILING DATE 22 Sept. 1995 (22.09.95)		PRIORITY DATE CLAIMED 28 Sept. 1994 (28.09.94)	
TITLE OF INVENTION PEPTIDES FROM THE hPTH SEQUENCE					
APPLICANT(S) FOR DO/EO/US ADERMANN, Knut; HOCK, Dieter; MAGERLEIN, Markus					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).</li> <li>4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input checked="" type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>					
Items 11. to 16. below concern document(s) or information included:					
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.  <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</li> <li>14. <input type="checkbox"/> A substitute specification.</li> <li>15. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>16. <input checked="" type="checkbox"/> Other items or information: <b>Verified Statement for Small-Entity Status</b></li> </ol>					
EXPRESS MAIL LABEL NO. EM457482646US					

17. ☒ The following fees are submitted:**BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):**

Search Report has been prepared by the EPO or JPO..... \$910.00

International preliminary examination fee paid to USPTO (37 CFR 1.482)  
..... \$700.00No international preliminary examination fee paid to USPTO (37 CFR 1.482)  
but international search fee paid to USPTO (37 CFR 1.445(a)(2)).. \$770.00Neither international preliminary examination fee (37 CFR 1.482) nor  
international search fee (37 CFR 1.445(a)(2)) paid to USPTO..... \$1040.00International preliminary examination fee paid to USPTO (37 CFR 1.482)  
and all claims satisfied provisions of PCT Article 33(2)-(4)..... \$96.00**ENTER APPROPRIATE BASIC FEE AMOUNT =****CALCULATIONS** PTO USE ONLY

\$ 910.00

\$ --

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	6 -20 =	0	X \$22.00
Independent claims	2 -3 =		X \$80.00

MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$260.00

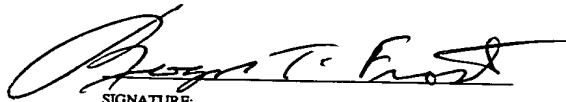
**TOTAL OF ABOVE CALCULATIONS =**Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement  
must also be filed (Note 37 CFR 1.9, 1.27, 1.28).**SUBTOTAL =**Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30  
months from the earliest claimed priority date (37 CFR 1.492(f)). + \$ --**TOTAL NATIONAL FEE =**Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be  
accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$ 40.00**TOTAL FEES ENCLOSED =**Amount to be:  
refunded \$  
charged \$

- a. ☒ A check in the amount of \$ 495.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
overpayment to Deposit Account No. 10-1215. A duplicate copy of this sheet is enclosed.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Roger T. Frost  
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191 Peachtree St., #3700  
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SIGNATURE

Roger T. Frost

NAME

22,176

REGISTRATION NUMBER

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,030,790  
DATED : March 27, 1997  
INVENTOR(S) : Knut Andermann et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6,

After line 56, insert the following text:

-- The reaction is stopped by adding sodium acetate with a final concentration of 100mM. Incubation is allowed to proceed for one hour.

The protein-peptide conjugate is separated from the peptide by repeated dialysis against 100mM phosphatebuffer, pH 7.2.

Example 4

Synthesis of the Multiple Antigenic Peptides (MAP)

The triple lysine branching is achieved by binding Fmoc-L-lysine (Fmoc) -OH to C-terminal alanine bound to Wang resin using three coupling cycles. Cleavage with piperidine then results in eight free amino functions where the sequences of the human parathyroid hormone are synthesized according to the above description.

Example 5

Immunization

For the first immunization, 125 mg of carrier-peptide conjugate or MAP per kg body weight of the animal to be immunized is dissolved in 250 ml of water and emulsified with 250 ml of complete Freund adjuvant. The emulsion is applied subcutaneously in 10 portions at various positions on the back.

Boosting is carried out after 2-4 weeks in an analogous fashion, the only change being the substitution of the complete Freund adjuvant by the incomplete Freund adjuvant.--

Signed and Sealed this

Twenty-seventh Day of August, 2002

Attest:



Attesting Officer

JAMES E. ROGAN  
Director of the United States Patent and Trademark Office